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Becoming, assemblages and intensities: re-exploring rules and routines

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Introduction

As we log into our computers, type in our passwords and connect to our extended world of networks, contacts and associations through emails, the internet and a wealth of applications, there can be a feeling that this electronic world appears automatically at our fingers tips with an endless series of connections, standards and routines being performed effortlessly. When things fail or go wrong (e.g. network errors, hardware problems, etc.), we may begin to question ideas of agency, process and accountability as we explore problems and possible solutions. Even in these occasions, we can easily slip into deterministic accounts that rely on certain *a priori* divides (e.g. subject/object; structure/agency; technology/society; nature/culture), simplistic cause-effect relations and a realist version of the ‘truth’ as existing out-there. Thus, in order to ‘explain’ or ‘account’ for the situation, certain object/subject positions, sets of relations and divides may be taken for granted and performed as such through this process. While such an approach has been evident in studies seeking to research the role of routines, procedures and standards within organizations, there is also an increasing number of approaches and theorists who seek to open up new spaces of enquiry by unpacking these divides and going beyond a realist representation of objectivity and ‘truth’. This chapter seeks to explore this area of enquiry – the making of standards, rules and routines – by comparing two approaches: sociomateriality (SM) on one hand and a conceptual framework inspired by Actor-Network Theory (ANT)¹ and by the work of Gilles Deleuze (2004) on the other. While much attention has been given to

¹ One of the difficulties when performing this form of comparison not only concerns the broad range of ideas and conceptual thinking under the heading of a particular approach but also the complex overlaps between ideas and theorists when situating specific boundaries and divides. Clearly we are not assuming that there are any simple, neat and distinct boundaries between these authors or approaches,

these moments when different theories and concepts conflict with each other, this chapter seeks to explore both the overlaps and subtle differences aligned to these approaches.

In particular, we wish to explore the ways in which we delve into how certain actions may lie behind the scenes in the process of standardising and performing routinized behaviour. For instance, within our everyday lives, we may experience numerous events involving the assembling of thousands of routines, standards and rules. Whether we are connecting to our computers or commuting to work, many different standards and routines continually come into play through these processes. For those who drive to work, this includes standards associated with the making and functioning of the mechanical and bodywork of our cars, the roads we travel along, the police, the traffic lights and speed controls which monitor and survey our progress. However, on many occasions, the making and performance of various routines and standards may not be visible as they vicariously act 'behind the scenes'. Thus, in order to go beyond simplistic accounts of agency, stability and change and to engage with the intricacies that may be seen as lying 'behind' the performance of rules, regulation and standards, we will explore how the conceptual thinking underlying approaches connected with SM and ANT/Deleuze seek to grasp the complexity and multiplicity of these organizational settings.

While there is a wealth of research conducted in this area, this chapter will examine the ways in which these two approaches provide fruitful lines of enquiry as well as subtle differences in the study of rules, routines and standards. This includes the way they share concerns with realist versions of stability and change, raise questions concerning the inclusion of materiality in the accounting process, but also the use of in-depth methodological approaches to the study of everyday practice. However, once you enter the more subtle levels of agency, novelty and issues of space, time and action certain differences also appear and this can lead to different accounts and treatments of notions such as repetition, materiality and agency.

This chapter will be divided into five main sections. The first section will endeavour to put forward the many overlaps and similarities between SM and an ANT/Deleuzian stance in relation to the exploration of rules, routines and practices. Having highlighted similar grounds for both approaches, we will then reflect on the notions of novelty, difference and repetition. Thirdly, while both approaches

but that there are some forms of thinking and habits that some groups appear to share in relation to these issues.

wish to integrate materiality into their accounts, we will examine how this is being performed in rather different ways, both conceptually and methodologically. The next section will draw on some empirical examples relating to an ethnography-inspired study of ink density within a newspaper-printing factory, in order to locate this conceptual comparison of the two approaches within a study of routines, standards and procedures in the workplace. This section will help to illustrate how our approach differs from SM as it seeks to explore difference, repetition and materiality within a specific organizational setting. The final section will then conclude with an overall discussion of the similarities and differences underlying these approaches and the implications for research within organizational settings.

Common ground(s) for sociomateriality and ANT/Deleuzian thinking

The study of rules and routines has been at the centre of an ever-increasing number of debates involving scholars from various academic traditions (Becker, 2004). Amongst this plurality of perspectives and approaches, a particularly significant avenue of thought has emerged from scholars who have sought to highlight the relational and performative aspects of routines through a focus on organizational practices (Schultze & Orlikowski, 2004; Orlikowski, 2007, 2010). Aligned with that body of research, SM has sought to challenge ideas of inertia and stasis associated with organizational practices, rules and routines. More than simply acknowledging the ubiquity of rules, routines, regulations and procedures, this has further led to a closer look at the ways in which these can become formalised and even institutionalised in hidden and pervasive ways. In addition to Feldman (2000, 2003) highlighting the idea of routines ‘working behind the scenes’ as complex accomplishments, Feldman and Pentland (2003) have also sought to distinguish between the ostensive and the performative aspects of routines. Such an approach strives to shift our thinking away from the view of organization as static places by focusing on the dynamicity, complexity and heterogeneity of these settings. Routines cease to be mere repetitive patterns of action and become dynamic and heterogeneous processes (Pentland & Feldman, 2007; Salvato, 2009; Salvato & Rerup, 2010). This attempt to grasp the dynamicity of practices and routines (Pentland & Feldman, 2005) implies exploring the assembling and operation of specific configurations while also acknowledging how these can also be challenged on certain occasions and within specific situations (Pratt & Rafaeli, 2006).

In light of this research, we can begin to appreciate the overlaps with an ANT/Deleuze-inspired form of thinking. Both approaches seek to engage with the processual nature of events through

a turn towards ideas of practice, dynamicity and difference. While they may use a different lexicon, these approaches emphasise their wish to avoid a realist notion of organizations as merely existing out there in some discrete and independent form or the view that routines and standards solely exist as things that simply determine certain outcomes or effects. This focus on practice and dynamicity within SM thus reverberates with the ways in which ANT seeks to explore how actions are the complex outcome of interactions between different sets of actors, practices and procedures (Latour, 2005), with a focus on process rather than stasis (Moser & Law, 1998). Within the work of Deleuze (2004, 2005), the issues of dynamicity and multiplicity are also key along with a shift from being towards becoming and the difference that underlies the process of repetition. Delanda further illustrates how Deleuze manages to perform openness by “making the world into a creative, complexifying and problematizing cauldron of becoming” (1999, 41).

We can also see that the turn towards the notion of dynamicity within the SM literature has not only challenged the idea of routines and rules as static and strongly institutionalised entities, but also questioned the intersection of agencies that are constantly being re-shaped and redefined (Nicolini et al., 2003). Additionally, this rethinking of agency has increased the recognition of non-humans, such as technologies, artefacts, programmes and certain applications (see Orlikowski, 2000; Leonardi & Barley, 2008; Pentland & Feldman, 2008; Schultze, 2008) within these accounts. In particular, the complexity of these relations and the distributed agency of human and material agencies have become much more developed in more recent studies of routines and relationships (D’adderio, 2008, 2011; Leonardi, 2011). This stance on agency clearly overlaps with research conducted under the banner of ANT. Although this approach has been deployed in many different ways in practice, the focus on materiality and on non-human forms of agency in empirical accounts (e.g. through a symmetrical treatment of both human and non-human actors and the avoidance of pre-existing categories and divides) remains a core feature of this approach (Callon, 1986; Law, 1986; Latour, 1988). Interestingly, a similar line of thought emanates from Deleuze in his collaborative work with Guattari (2004) where they note that no distinction should be held between nature and society. Again this highlights a requirement to avoid assuming object/subject positions or certain boundaries and divides as pre-existing in an *a priori* form.

It is interesting to highlight that these two approaches (SM and ANT/Deleuzian thinking) not only share certain theoretical overlaps under the form of a shift towards process, dynamicity,

heterogeneity and the material, but also present similar methodological stances in relation to the study of organizational rules and routines. Not only has ethnography or in-depth case studies constituted a major form of empirical research associated with the 'turn towards practice' within the SM literature (Schatzki et al., 2001; Whittington, 2006; Orlikowski, 2007, 2010), but these are also often the mainstay of many ANT and Deleuzian based studies. While there are fewer empirical studies that adopt a Deleuzian stance (Mazzei & McCoy, 2010; Coleman & Ringrose, 2013), an ethnographic style of investigation can fit well with such a conceptual approach (see Mahler, 2008; Crociani-Windland, 2011; Rai, 2011; McLean & Aroles, 2014). In relation to ANT, this can take the form of 'following the actors' (Law, 1991; Latour, 2005) in order to trace the complex networks of relations and actions that become assembled around the making of facts, events and object/subject positions. In both cases, such a methodological approach enables the researcher to key into the minutiae of rules and routines and the complexities, tensions and possibilities associated with various actions and organizing practices (Law, 2004). Thus, the imperative of conducting in-depth and on-site empirical studies of specific rules or routines is clearly apparent in all of these approaches, as both focus on the encounters of organizing and the localized differences of everyday practices.

As highlighted above, there are clear similarities and overlaps between how these approaches respond to certain concerns with the study of rules, routines and practices of organizing. When delving deeper below the surface level of agencies, materiality, space and time it is also interesting to explore the more subtle differences between the approaches. Within the next section we will explore these differences in relation to the study of novelty and repetition.

Stability, novelty and change: from a differentiated phenomenological form of repetition towards a becoming of difference

Repetition is conventionally thought in terms of repeating something in the image of the same. For instance, each day when we awake and look out the window, we do not think about the window being any different from the day before. In terms of its identity, we may view it as the same window as the one the hour, day and week before. Another example could be the apparently strictly identical and perfectly repetitive practice of entering everyday our passwords in order to log into our email accounts; it may feel as if we are simply completing a series of impeccably repetitive actions (e.g. as we re-enter the same password each day). In both cases, we are faced with a view of stability and inertia that enables the window and the practice of logging-in to be based on the image of the same. It also relies

on a particular view of space, time and action: one that assumes the progression of linear and chronological views of time where things exist along that arrow in time and in space. While accounts based on both SM and ANT/Deleuze may have sought to challenge an understanding of practices and routines which merely exist in space and time (e.g. through an engagement with the dynamic and ever-changing nature of routines, rules and organizational practices and the complexity of organizational life), when you begin to delve deeper into ideas of repetition in relation to notions of stability, change and novelty you begin to appreciate how certain differences may set apart sociomaterial and ANT/Deleuzian approaches.

The distinction established by Feldman and Pentland (2003) between the ostensive and the performative aspects of routines provides a good basis upon which to explore such a difference in ideas of repetition and difference. Repetition based on this perspective is divided between the ostensive domain that encapsulates the structures, cultures and rules *in principle* and the performative domain that is created and played out through actions *in practice* (Feldman & Pentland, 2003). The recursive relationship between the two domains provides a mutual constitution of people and things as they come together through the ostensive and the performative aspects, leading to rules and routines being applied/followed, resisted or adapted through everyday practices. While the ostensive aspect first provides a sense of structure and guidance for the performative aspect (e.g. human action resisting or following certain rules or routines), the performative aspect in turn is seen to impact on the ostensive through the repetition of the routine, structure or cultural apparatus (Pentland & Feldman, 2005). In other words, the ostensive is re-shaped by the performative through the repetition of the routine in practice. This raises questions concerning how such an account comprehends process, repetition and difference; what is repeated; where do stability and change enter our accounts and how are space, time and action viewed?

Firstly, as discussed earlier, a focus on fixed identities (e.g. routines) is problematic for both our rendering of ANT and this account of SM as both wish to focus on process and the perspective of 'doing'. However, when we look at SM more closely, there remains a sense of the ostensive as the more stable and more established element in the circle of change even though the action of the performative may alter how it is applied in practice – whether this be a rule, routine, procedure or some other form of structural element. Furthermore, there is a feeling that the possibilities of the performative aspect to alter the ostensive aspect of routines are limited as the routine becomes

stabilized. In that sense, difference only appears to enter the accounts as people begin to alter, resist, adapt or follow a specific rule or routine. Clearly, there is also a desire within SM to produce accounts which incorporate other forms of agency beyond human action (e.g. non-human actors such as technologies, procedures or artefacts), as highlighted in the work of Orlikowski in describing the coming together of technologies and humans as “constitutive entanglements” (Orlikowski, 2007) as well as others who have illustrated the role of the material and non-human aspects (D’Adderio, 2008, 2011; Leonardi, 2011). Despite this inclusion, non-humans appear to enter the scene mainly via the ostensive domain and they exist in very different forms to the human agents engaged in performing everyday practice. Furthermore, the role of artefacts is seen as ultimately limited; “even artifacts that attempt to codify behavior are inherently limited in their potential to specify particular performances” (Pentland & Feldman, 2005, 797). Therefore, it appears that human action is given a particular status when accounting for subjectivity and for specific forms of difference. Ultimately, difference appears to be more phenomenological in its final expression. Within these accounts, material agency certainly comes into play during encounters between people and ‘things’ (structures, standards, routines, procedures); however, there is still a strong sense of distinction between the two and a clear separation in this process of repetition (either afforded by the constraints of the structures or by the subjectivity of the humans). Repetition returns through the structures, cultural apparatus, rules, and procedures of the ostensive domain and this sets the scene for the performative setting where people or groups may decide to resist, adapt or follow the rules, procedures or routines through everyday practice. While people and groups may change the form of things, such as rules, procedures and routines within the performative stage, they return as apparently stable entities within the ostensive waiting for further actions in the performative stage of the process. Difference then appears in the sense that these rules or routines may be followed or altered in practice. This includes the opportunity for multiplicity as people may have different interpretations and adaptations of the ostensive aspect of the routine. Such an approach not only relies on the view of different potentialities (McLean, 2013) being realized through alternative interpretations of the ostensive (e.g. by people and groups through their everyday practices), it also returns us to a focus on stasis, being and *a priori* divides (such as nature/culture) rather than becoming and potentialities. If being relates to notions of identity and generality, becoming is concerned with the processual nature events and invites us to explore the dynamicity and complexity underlying organisational events. While SM may seek to dissolve the structure/agency dualism by

focusing on specific localised practices, when exploring repetition and difference in this way, we can see how the dualism, however small and localised, still simmers below the surface.

Latour (2005) and Deleuze (2004) in contrast have sought to develop an alternative understanding of process and repetition: one that differs greatly from our more common understanding, as it seeks to delve deeper into the complexities associated with apparently mundane processes and events. Rather than repetition as a product of identity, they focus on the assemblage of difference and the continual process of mediation, work and effort in the production of what may appear in the image of the 'Same'. This involves highlighting the problems of approaching difference and repetition through the lenses of identity and representation as "difference must be shown differing" (Deleuze, 2004, 68). This requires a shift to a focus on becoming rather than being, as every repetition is a novel encounter. Repetition thus appears as a complex and multi-layered achievement – a constant performance that requires much work in order to produce the image of sameness and identity that seems to prevail through everyday practices. Both ANT and Deleuze explore the active process underlying repetition and the complex assemblages of mediators or mediating entities that produce specific outcomes. Such an approach begins to shed light upon the forces and intensities as well as the novelty and difference which underlie the process of repetition. Put differently, even when certain practices appear to repeat in a similar fashion, this requires an appreciation of the active processes of differentiation that creates novelty, even in the image of the Same. As such, repetition is thus grounded on difference (Deleuze, 2004), or in Deleuze's words, "we produce something new only on condition that we repeat" (2004, 113).

While ANT approaches this issue of difference and repetition in many different ways (e.g. Law & Singleton 2005), their interest in alteration and in how stability and change are performed through discontinuities clearly overlaps with the work of Deleuze (2004). Thinking through difference and repetition not only allows for the development of an entirely novel way to approach standards – not as static entities but rather as the outcomes of complex inter-actions between a wealth of actants and processes – but also a re-thinking of stability and change as we explore the fields of forces and desires within distributed networks of relations continually acting and becoming. By appreciating the dense assemblage of certain intensities and acts of engagement, we can begin to explore the complex negotiations and relations between apparently antagonistic processes such as stability and change or presence and absence.

This approach thus seeks to move away from a focus on generality and identity when thinking ideas of stability and change, alterity and novelty, through an engagement with the complex process of difference that underlies the actions of repetition. Ultimately, the aim of such an approach is to think difference ‘in itself’ rather than as subordinated to some transcendent form of agency. Such an understanding of novelty and unexpectedness seeks to propel us towards an appreciation of difference as related to becoming, which reflects how the assembling of a wealth of (f)actors leads to the production of certain outcomes and how materiality comes into play.

Organizational materiality: agencements and relationality

Our understanding of repetition in relation to ideas of novelty and difference considerably affects how we study routines, standards and procedures within organizations as well as the materiality of everyday practices. This is linked to concerns within organizational studies that little attention had been given to the material except under the form of some secondary role. In other words and as highlighted by Barad, “Language matters. Discourse matters. Culture matters. There is an important sense in which the only thing that does not seem to matter anymore is matter” (Barad, 2003, 801). As outlined above, SM has sought to cast a new look on technologies in organizational settings through a focus on the materiality underlying everyday organizational practices (Orlikowski, 2010). Upon considering materiality as a “combination of material and form” (Leonardi, 2012, 29), SM seeks to explore how both material and form are performed through social practices and contexts.

When we consider the work of those who have been influential both to the conceptualisation and to the development of sociomateriality, we need to highlight how materiality has ceased to solely play a passive role in empirical accounts and has become a key element in the appreciation of the complexity of organizing practices. Very much aligned with Pickering’s idea that “material and human agencies are mutually and emergently productive of one another” (Pickering, 1993, 567), SM posits that the social and the material are inseparable in accounts depicting organizational practices (Orlikowski & Scott, 2008). This has led to the recognition of the role of artefacts in relation to the performance of routines but also the appreciation of the complexity of organizational assemblages (D’Adderio, 2008; Leonardi, 2011) as previously outlined. While this perspective on materiality has opened up new avenues of thought by allowing us to further unpack practices and processes, it also remained anchored to ideas relating to the social/material divide that echoes back to the distinction between human and non-human entities previously mentioned. In other words, what becomes apparent

when reading such accounts is that the social relates to humans and the material to different forms of non-humans or objects (including techniques, structures and material cultures and practices)². This issue raises questions of how the ‘material’ is viewed and encapsulated within our accounts (Law, 2004) and how it should be conceptualised in relation to time, space and action.

How materiality is introduced into our accounts therefore raises further issues of concern as highlighted by Mol and Law (1994). In particular, they describe the need to exercise caution as there can be a tendency to break down fluid relations into static and distinct entities, thus losing the dynamicity and the processual nature of the practice. This could be seen as the ‘materiality’ of the ostensive domain as it interacts with the performative aspects of the everyday organizational practice. By starting with a focus on difference in relation to the repetition of rules and practices, we seek to engage with an alternative sense of materiality: one that embraces this idea of fluidity in practice through the lens of assemblages or rather agencements³. Not only does approaching materiality through agencements seek to overcome any *a priori* dualistic views on the phenomenon studied, but in addition this perspective searches for ways to become sensible to the wealth of forces, intensities and desires that underlie organizational assemblages. Therefore, an emphasis on organizational assemblages allows us to highlight how materiality relies on the performance of certain actions, relations and connections embedded in complex forms of space, time and action.

Such an appreciation of materiality through agencements also allows us to key into further actions and practices that may go unnoticed, as they seem to be hidden or obscured from certain views. While some actions may appear in a more ‘clear’ and ‘apparent’ way, others may emerge in discontinuous forms and as ‘dark precursors’ (Deleuze, 2004) as they apparently act in silent ways behind the scenes. In fact in some cases, action may rely on these remaining effaced, hidden and black-boxed (making something absent to make others present), as certain actions and engagements are foregrounded while others fade into the background within a complex relationality expressed through organizational actions, forces and possibilities. In that sense, this view of assemblages challenges linear understandings of time and space as they involve a process of becoming which underlies the forming of connections with a plethora of (f)actors. As such, agencements should be approached as a relational

² It is interesting to see how Latour (2005) rethinks the idea of the social beyond the category of human through to the process of associating.

³ See Phillips (2006) for a discussion on assemblages and agencements.

accomplishment as once materiality leaves the realm of inertia and enters the domain of relationality and becoming, new possibilities open up as materiality becomes an active and productive force in a very different way.

Studying organizing practices through an alternative approach to repetition therefore opens up new avenues of thought in relation to our understanding of objects, materiality, action, agency, further enabling us to explore how the heterogeneous assembling of relations becomes together from a variety of spaces, times and other forms of actions. By re-thinking materiality through the lens of agencements and relations, we can operate a shift away from accounts that assume objects in a stable or external form or through a representational lens. In contrast, it becomes possible to explore how the making of certain practices, scripts and facts can become entangled with a strong sense of materiality and how this sense of materiality becomes manifested via specific nests of relations and associations. Rather than materiality being a simple and objective characterization of an artefact, it highlights how materiality is relational and engaged in a continual performance. In that sense, materiality is not only imbued in a process of becoming, but also in a process of becoming assembled. Furthermore, through a focus on ideas of multiplicity and heterogeneity, we can begin to speak of materiality in terms of texture and agencements that capture its performative and relational aspects. These questions will be further explored and illustrated within the next section through a brief case study relating to research we conducted in a UK newspaper-printing factory.

Repeating ink standards: empirical illustration of difference

While the main focus of this chapter concerns the similarities and differences between a sociomaterial and an ANT/Deleuzian approach, the brief example below from an empirical study of specific rules and procedures within a UK newspaper-printing factory, will help to illustrate some of these issues through an actual case. The research was conducted using various phases of participant and non-participant observations (pre-press, press hall, post-press); attending meetings (Key Performance Indicators, management meetings, etc.); shadowing printers and team leaders during day and night shifts; conducting interviews and studying documentary evidence over a seven-year period⁴. In that

⁴ While this chapter specifically focuses on the similarities and differences between SM and ANT/Deleuzian thinking, it also links to our previous book chapter in the Palgrave edited collection on “Materiality and Time”, by developing these ideas in the context of rethinking difference and repetition (McLean & Aroles 2014). While this chapter also develops a brief extract of an empirical example

sense, the methodology deployed was largely ethnographically inspired and sought to get a deeper understanding of the organizing practices in this factory.

Over the years, the factory employed various Lean Management practices and these were apparent in practice through the development of an ever-increasing range of control and monitoring practices. One of these related to the introduction of increased controls over ink usage and the quality of the copies produced. These measures were often connected to a sense of repeatability and consistency in the printing factory as repeatability was regularly presented as an essential aspect underlying the printing process. This not only related to consistency, regularity and repeatability in the quality of copies, but also standards of health and safety, control and measurements. In particular, we focused on the ways in which this repeatability was being played out in practice and how specific concerns were articulated by different individuals, groups and departments within the printing factory.

Repeatability was often acknowledged by both printers and team leaders as a complex thing to achieve in practice. For instance, Mike⁵, a printer within the factory, explained that “sometimes runs go well and on other occasions, not so well”. He went on to provide an example of how the temperatures of the presses can increase during a run and this can lead to various defects on the copies (e.g. ink not transferring properly onto the paper or an increased likeliness of ink accumulation towards the edges of the rolls). However, trying to control the process of repeating good copies at an efficient speed was seen as a major focus for the printing factory.

As we have discussed elsewhere (see McLean & Aroles, 2014), repeatability was also a key theme underlying the setting of ink density standards and during a higher-level management meeting one particular cost item, in the form of ink usage, became the focus of interest. Further reports containing financial and production evaluations of ink density and usage were requested to investigate this issue that further intensified the problem of over usage. Ink trials were then performed on all the presses, testing the density of ink needed to produce ‘good’ quality copies and the emerging standard density values were set for all published titles. This led to the introduction of a whole set of new practices and artefacts. More precisely, following the call for the reduction of ink density, the printing factory purchased ink densitometers – devices that give an instantaneous reading of the density of ink

from this chapter to illustrate the points within this piece, the previous chapter provides a more in-depth discussion of the example and theoretical ideas of repetition and difference.

⁵ All the names in this chapter have been anonymised. The quotes come from discussions with informants who were fully aware of our role as researchers and that the material could be published as part of the research process.

used on a particular copy. This was seen as a necessary part of the control process to ensure that printers were following the newly established standards, and the printers were required to use the densitometers to measure ink density on a random sample of copies from the runs on a daily basis. Additionally, the continuous improvement manager would often check these figures to make sure they were being correctly recorded. Finally, the figures obtained were gathered in reports that could appear in the daily production meetings to highlight good or poor practice, as well as monthly management meetings.

While these set densities were presented as guaranteeing the production of ‘good copies’ by the management, printers expressed serious concerns in relation to how this would impact on their daily practices. More precisely, certain printers described how these strict standards could become highly problematic as they could reduce the quality of certain content, such as advertisements. They explained how more of a particular colour and less of another might be needed in order to reflect certain subtleties or particularities of the advertisement and that a case-by-case approach was much more appropriate, however, this may go against good practice measured in terms of ink usage (as they would go above the standard usage). For instance, when showing various pictures of grass in the background, Mark (a printer) said

“well the green of this grass is lighter than that one and if you look at this one [turning pages], you can’t get it too dark as there would not be enough contrast with that red sweater [pointing at a advert containing someone wearing a sweater]”.

Clearly, this not only raised concerns around the achievement of repeatability in practice, but also in relation to what was seen and enacted as an instance of a ‘good’ copy with regards to advertising. Other printers highlighted the conflictual nature of the new requirements: a ‘good’ copy was simultaneously a cost-conscious copy aligned with ink density standards and a quality-oriented copy that relied on different sets of material arrangements.

If we consider the process of performing and repeating ‘good’ quality copies in practice, it may appear that repeatability – in relation to ink density – can be relatively simply achieved by ensuring the same conditions for all the runs. There is an image of continuous improvement where stability, simplicity and sameness is seen to underlie the inscribed repetition of daily practices and the image of printers complying with ink density standards each day as this procedure is repeated identically over time. However, when you begin to observe this process each day, you begin to see the

different mediations, competing scripts and issues in practice. From a SM perspective focusing on the ostensive and performative aspects, this could be explained in terms of the ostensive aspects (the rules *in principle* such as the ink density standards) interacting with the performative aspects (the printers' everyday practices of altering the settings to deal with the need to ensure high quality copies). The recursive nature of such a relationship of mutual constitution would then feedback into the shaping of the structural aspects of the ostensive, before again returning to the micro dynamics of the performative through everyday practice.

Such an approach seeks to highlight the plethora of factors, actions and acts of engagement embedded in particular processes and practices and how they can produce a simulacrum of repeatability as well as the occurrence of difference. The rules and routines would be seen to structure the work of the printers by providing a particular way of operating, but that due to the other structural, cultural and performative aspects which surround them (such as their own subjectivity), difference may be produced in how they implement the rules and routines: rather than following the rule, they may sometimes adapt or resist it. While such an approach shifts our thinking towards a more process and practice-based perspective, there is still a sense that objects (rules, routines, structures) have some independent (although recursively related) existence alongside the humans who perform these in practice. In other words, while they may mutually constitute each other in diverse ways and this may change over time, they remain situated as distinct aspects in space and time.

If we refrain from this idea of subjects and objects existing in space and time, we can begin to catch sight of the many parameters that underlie such a process. These could include a plethora of factors emerging through different experiences, tiredness, subjectivity of colour, standards, which titles are included in the run, different dampness of paper, a build up on the rollers, conflicting scripts of quality, what is considered 'good' copy, etc. By using ideas emanating from ANT/Deleuzian thinking, we can venture beyond the idea that these exist as discrete elements and explore how intensities emerging from specific organizational events produce the setting for these complex engagements and assemblages. In contrast to entities or structures returning, a flood of intensities emerges from pure past and future expectations within the event: engaging, assembling, amplifying and simplifying within this cauldron of becoming. While there may be many different lines of flight and actualizations, this is not a setting of chaos or ambiguity as the assembling of these many differences can create the image of linear repetition, enduring stability and durability. In other words, this may appear to imply a certain

fragility in the notion of repeatability (as agencements are dependent upon a wealth of intensities and mediators which may be repeated into action through the manifestations of difference), it is the quality and quantity of these connections and interactions and their ability to amplify and simplify which produce such a sense of repetition. Without this continuous work and effort none of this would be possible as repetition relies on difference. Thus, it is important to be aware of the complex interplays between difference and repetition, stability and change or continuity and discontinuity within our accounts. In that sense, materiality is not simply associated with the way printers would engage with the densitometer (as a material object), but with the wealth of intensities, forces and differences expressed through the various sets of practices which surround the practice of measuring and reporting ink density usage.

Rules, routines and practices therefore rely on complex assemblages of engagement and interaction and by developing an ANT/Deleuzian stance in such a way within an organizational setting, we can begin to engage in the complexity underlying the repetition of rules and routines. Rather than focusing on people as a major source of difference we can begin to explore how difference makes people and things. In other words, the complex work, mediation and negotiations lying behind repetition are not merely the result of human interacting in a particular environment – this production has to be thought outside the phenomenological form of difference and differentiating. In that sense, the repetition of practices through difference is connected to the event – that is to say to the temporality and spatiality of the actions and of the assemblages – to the wealth of forces and intensities that underlie the repetition of certain actions and practices and to the materiality of practices.

Furthermore, we can see that while difference underlies the repetition of the practices of (re)producing ink density, there is also a strong sense of materiality that is associated with this practice. More precisely, in relation to the organizing practices related to ink density matters, we can see examples where actions coming from different spaces, times, and action are continually assembled and repeated through everyday manufacturing practices (where certain parameters or factors are enacted as more important at particular times, such as when the factory focused on the control of ink usage over a specific period of time). This includes making certain intermediaries in the forms of standards and routines a central part of the everyday practices of making things happen within the factory setting. This is not to say that these remain as matters of fact as during times of controversy, investigation or when other matters of concern arise, these black boxes may be opened up as specific organizational

issues shift from matters of fact to matters of concern (Latour 2004).

Discussion and conclusion

Within this chapter, we have sought to highlight both the many similarities as well as the subtle differences that underlie sociomateriality and an ANT/Deleuzian approach to the study of organizational rules, routines and practices. While it is important to acknowledge that both sociomateriality and ANT can take many different forms and directions (e.g. certain SM approaches associate themselves more closely with ANT such as the work of Fenwick, 2012 and Thompson, 2012), by looking more specifically at the notions of difference, novelty and materiality one can catch sight of subtle differences that may set approaches apart. For instance, within both SM and ANT/Deleuzian thinking, there is an acknowledgment of the dynamic forces operating through the process of repetition, however, in order to capture this dynamicity, SM has a tendency to separate the more structural elements that form the foundations of action from the performative role often associated with human agency. In contrast, by exploring repetition as grounded on difference, it is possible to become absorbed in the intensities, forces and tensions which coalesce and assemble through specific occasions while also seeking to avoid such problematic divides (e.g. macro/micro, subject/object, structure/agency) and ideas of space, time and action as existing ‘out there’.

The temporality and spatiality of these practices and routines is particularly important when studying repetition. While both approaches seek to focus on process and change, on further reflection it becomes apparent that the SM approach relies on a sense of repetition through identities existing and returning either in the form of entities, structures or people. On the contrary, an ANT/Deleuzian stance seeks to focus on events. Events are much more than the gathering of actors; they are moments when various forms of temporality, spatiality and intensity coalesce through certain points, thus producing specific agencements and configurations. The uniqueness of the event implies that things never actually repeat identically – that is to say in the image of the Same – but are grounded on difference. In other words, difference continuously enters the scene through the role of intensities that serve to produce the eternal return and not simply the return of identities in the form of objects and structures (even if they are seen to change over time or have a multiple existence depending on how they are applied in practice). This then requires a shift away from identity and being in favour of becoming in order to key into these complex organizational practices and routines. In other words, while the production of difference through repetition is considered more phenomenological on one side, it is *intensive* and

event-ual on the other. Moreover, as previously highlighted, the way one understands repetition, novelty and difference is directly associated with the process of accounting for materiality within our research. If we consider the case of the densitometer and the various standards and practices around its use, we can explore how materiality is best captured as a form of encounter, as an empirical relational engagement and as such materiality involves a semiotic process rather than something merely associated with objects and things.

In conclusion, within this chapter we have sought to highlight the similarities and differences between these two approaches. This has included developing a particular way of thinking ANT and Deleuze in order to study rules and routines through a focus on difference, assemblages and materiality. This involves keying into the ways in which novelty emerges from apparently repetitive patterns of action, as repeatability as well as images of stability associated with the printing process requires the assembling of many different relations and much work, effort and mediation. Thus, by delving into the minutiae of organizing, difference and the process of becoming, it is possible to become sensitive to the various intensities flooding in from the pure past and future expectations through specific material memory traces. Such a focus on the multiplicity of temporalities and spatialities along with the turn towards becoming and difference could open up new realms of endless and fascinating possibilities in terms of both conceptual and empirical investigations of organizational worlds; as Deleuze stated, “nothing is more troubling than the ceaseless movements of what seems immobile” (1997, 214)⁶.

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⁶ Own translation. Original quote is “Rien n'est plus troublant que les mouvements incessants de ce qui semble immobile”.

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